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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,514	12/24/2001	Francis Pilloud	P/3328-41	9298
2352	7590	06/30/2005	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			WORKU, NEGUSSIE	
			ART UNIT	PAPER NUMBER
			2626	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/026,514

Applicant(s)

PILLOUD, FRANCIS

Examiner

Negussie Worku

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/24/05 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/12/02 5/23/02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monney (USP 5,747,795) in view of Kiyomoto et al. (USP 5768026).

With respect to claim 11, a scanning device (scanner 1 of fig 1) for register marks (a register mark 12 of fig 1) printed onto a substrate (traveling web 10 of fig 1) which travels into a polychrome printing machine, comprising at least one light source (light source situated behind the machine is injected into optical fibers 30 of fig 1, see col.3, lines 60-65), enlightening on the substrate (10 of fig 1) a lighting area (scanning area 32 of fig 1) crossed by the register marks (a registered mark 12 of fig 1), an optic (optical fiber 40 of fig 1) which allows obtaining on a photosensitive element (scanner 1 of fig 1), made up of a plurality of pixels, the traveling images of said register marks (12 of fig 1) made up of a plurality of portions (marks 12, having plurality of portions, as shown in 12 of fig 1) successively scanned according to a certain scanning rate, and the pixels produce electric pulse, see (col.3, lines 50-55).

Monney does not teach or disclose a microprocessor connected with the at least one light source for controlling the lighting of the light source and for controlling the electric pulses produced by the pixels.

Kiyomoto et al. in the same area of photoelectric detector for a register control device with in optical apparatus (fig 49) teaches a microprocessor (computer 34 of fig 49) connected with the at least one light source (light source 35 of fig 49) for controlling the lighting of the light source and for controlling the electric pulses produced by the pixels, see (col.19, lines 10-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Monney to include: a microprocessor connected with the at least one light source for controlling the lighting of the light source and for controlling the electric pulses produced by the pixels.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of money by the teaching of Kiyomoto et al. for the purpose of obtaining a perfect final image, for all the prints of different color to be exactly superimpose.

With respect to claim 12, Monney discloses scanning device (1 fig 1), comprising at least two of the light sources (light source 30 of fig 1) which illuminate the substrate on the lighting area, (light area 42 of fig 1) with each of the light sources illuminating a plurality of portions of each of the register marks (marks 12 of fig 1) which portions are positioned to be successively scanned by two photosensitive element (scanner device

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1 of fig 1) and each light source (30 of fig 1) providing a respective modulation of at least one of intensity and color during the scanning of the register marks (marks 12 of fig 1).

With respect to claim 13, Monney discloses the scanning device (1 of fig 1), further comprising an optic disposed (optic fiber 40 of fig 1) between the lightning area (42 of fig 1) and the photosensitive element (scanner 1 of fig 1) for directing light reflected from the lightning area to the photosensitive element (scanner 1 of fig 1).

With respect to claim 14, Monney discloses the scanning device (1 of fig 1), wherein the illumination of the lighting area (42 of fig 1) to be performed in synchronism with the scanning rate of the individual portions of the images (12 of fig 1).

Monney does not teach or disclose a microprocessor connected with the at least one light source.

Kiyomoto et al. in the same area of photoelectric detector for a register control device with in optical apparatus (fig 47-49) teaches a microprocessor (computer 34 of fig 49) connected with the at least one light source (light source 35 of fig 49), see (col.19, lines 10-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Monney to include: a microprocessor connected with the at least one light source for controlling the lighting of the light source and for controlling the electric pulses produced by the pixels.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of money by the teaching of Kiyomoto et al. for the purpose of obtaining a perfect final image, for all the prints of different color to be exactly superimpose.

With respect to claim 15, Monney does not disclose a microprocessor is operable for causing the modulations of the illuminations of the lighting are to be performed in synchronism with the scanning rate of each register mark.

Kiyomoto et al. in the same area of photoelectric detector for a register control device with in optical apparatus (fig 47-49) teaches a microprocessor (computer 34 of fig 49) connected with the at least one light source (light source 35 of fig 49), see (col.19, lines 10-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Monney to include: a microprocessor connected with the at least one light source for controlling the lighting of the light source and for controlling the electric pulses produced by the pixels. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of money by the teaching of Kiyomoto et al. for the purpose final image, for all the prints of different color to be exactly superimpose.

With respect to claim 16, Monney does not disclose a microprocessor for causing

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the number of modulations per unit of obtaining a perfect time to be the same as the number of portions of image scanned at same time.

Kiyomoto et al. in the same area of photoelectric detector for a register control device with in optical apparatus (fig 47-49) teaches a microprocessor (computer 34 of fig 49) connected with the at least one light source (light source 35 of fig 49), see (col.19, lines 10-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Monney to include: a microprocessor connected with the at least one light source for controlling the lighting of the light source and for controlling the electric pulses produced by the pixels. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of money by the teaching of Kiyomoto et al. for the purpose final image, for all the prints of different color to be exactly superimpose.

With respect to claim 17, Monney does not disclose a microprocessor operates the light source in continuation of different modulation, and the light area is subject to illumination variation.

Kiyomoto et al. in the same area of photoelectric detector for a register control device with in optical apparatus (fig 47-49) teaches a microprocessor (computer 34 of fig 49) connected with the at least one light source (light source 35 of fig 49), see (col.19, lines 10-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Monney to include: a microprocessor connected with the at least one light source for controlling the lighting of the light source and for controlling the electric pulses produced by the pixels.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of money by the teaching of Kiyomoto et al. for the purpose final image, for all the prints of different color to be exactly superimpose.

With respect to claim 18, Monney does not disclose a microprocessor adapted for establishing that during a light cycle, the amount of either different color and intensity applied of the register marks applied to the lighting area are proportional to the number of register marks of different colors that are scanned.

Kiyomoto et al. in the same area of photoelectric detector for a register control device with in optical apparatus (fig 47-49) teaches a microprocessor (computer 34 of fig 49) adapted for establishing that during a light cycle, the amount of either different color and intensity applied of the register marks (12 of fig 1) applied to the lighting area are proportional to the number of register marks of different colors that are scanned (light source 35 of fig 49), see (col.19, lines 10-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Monney to include: for establishing that during a light cycle, the amount of either different color and

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intensity applied of the register marks applied to the lighting area are proportional to the number of register marks of different colors that are scanned.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of money by the teaching of Kiyomoto et al. for the purpose final image, for all the prints of different color to be exactly superimpose.

With respect to claim 19, Monney discloses the scanning device (1 of fig 1), further comprising the light source (30 of fig 1) supply for each color of the register marks (12 of fig 1) supplies at least one of a light of the wave length ranging between 380 nm and 780 nm and an intensity between 5% and 100% of the maximum intensity for improving the contrast of the register marks (12 of fig 1) compared to the substrate at the lighting area (42 of fig 1).

With respect to claim 20, Monney discloses the scanning device (1 of fig 1), where in the photosensitive element (scanner 1 of fig 1) comprises a plurality of pixels (marks 12 of fig 1) which are sensitive to at text one wave length of at least one printed color, see (col.3, lines 60-65).

With respect to claim 21, Monney does not disclose a microprocessor adapted for establishing that during a light cycle, the amount of either different color and intensity

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applied of the register marks applied to the lighting area are proportional to the number of register marks of different colors that are scanned.

Kiyomoto et al. in the same area of photoelectric detector for a register control device with in optical apparatus (fig 47-49) teaches a microprocessor (computer 34 of fig 49) adapted for establishing that during a light cycle, the amount of either different color and intensity applied of the register marks (12 of fig 1) applied to the lighting area are proportional to the number of register marks of different colors that are scanned (light source 35 of fig 49), see (col.19, lines 10-15).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the imaging apparatus of Monney to include: for establishing that during a light cycle, the amount of either different color and intensity applied of the register marks applied to the lighting area are proportional to the number of register marks of different colors that are scanned.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of money by the teaching of Kiyomoto et al. for the purpose final image, for all the prints of different color to be exactly superimpose.


With respect to claim 22, Monney discloses the scanning device (1 of fig 1), wherein the successively portion of the images on the substrate (10 of fig 1) are geometrically shaped and are of a width ranging between 0.1 and 5mm.

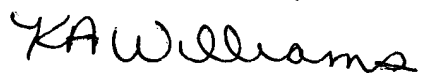
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3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Negussie Worku whose telephone number is 571-272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on 571-272-7471. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Negussie Worku
Patent Examiner
Art unit 2626
June 23, 2005


KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER